

WEST

[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 29 of 29 returned.** 1. Document ID: US 20020022427 A1

L11: Entry 1 of 29

File: PGPB

Feb 21, 2002

PGPUB-DOCUMENT-NUMBER: 20020022427

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020022427 A1

TITLE: User-activatable substance delivery system

PUBLICATION-DATE: February 21, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Curro, John Joseph	Cincinnati	OH	US	
Alwattari, Ali Abdelaziz	Hamilton	OH	US	
Benson, Douglas Herrin	West Harrison	IN	US	
Kaminiski, Anneke Margaret	Cincinnati	OH	US	
Mansfield, Michele Ann	Cincinnati	OH	US	
Strube, John Brian	Hamilton	OH	US	

US-CL-CURRENT: 442/373; 428/192, 428/81, 442/327[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)[KWMC](#) | [Drawn Desc](#) | [Image](#) 2. Document ID: US 20020013568 A1

L11: Entry 2 of 29

File: PGPB

Jan 31, 2002

PGPUB-DOCUMENT-NUMBER: 20020013568

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020013568 A1

TITLE: Disposable human waste management devices with improved adhesive flange attachment means to facilitate water adhesion stability with low pain level removal

PUBLICATION-DATE: January 31, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Cinelli, Fabio	Bologna		IT	
Colaianni, Antonello	Pescara		IT	
Tordone, Adelia Alessandra	Pescara		IT	
Munro, Hugh Semple	Chipping Camden		GB	
Tighe, Brian John	Birmingham		GB	

US-CL-CURRENT: 604/387

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [EWC](#) | [Draw Desc](#) | [Image](#)

3. Document ID: US 20020004350 A1

L11: Entry 3 of 29

File: PGPB

Jan 10, 2002

PGPUB-DOCUMENT-NUMBER: 20020004350

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020004350 A1

TITLE: Film having high breathability induced by low cross-directional stretch

PUBLICATION-DATE: January 10, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Morman, Michael Tod	Alpharetta	GA	US	
Hwang, Patricia Hsiaoyin	Alpharetta	GA	US	
Ono, Audrie Tomoko	Atlanta	GA	US	
Welch, Howard Martin	Woodstock	GA	US	
Morell, Charles John	Roswell	GA	US	
Ohan, Faris	Knoxville	TN	US	
Potnis, Prasad Shrikrishna	Duluth	GA	US	
Daley, Michael Allen	Alpharetta	GA	US	
Conyer, Sjon-Paul Lee	Roswell	GA	US	

US-CL-CURRENT: 442/381, 428/910, 442/393, 442/394, 442/398,  
442/400, 442/401, 442/417

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [EWC](#) | [Draw Desc](#) | [Image](#)

4. Document ID: US 6369292 B1

L11: Entry 4 of 29

File: USPT

Apr 9, 2002

US-PAT-NO: 6369292

DOCUMENT-IDENTIFIER: US 6369292 B1

TITLE: Absorbent articles having reduced outer cover dampness

DATE-ISSUED: April 9, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Strack; David Craige	Canton	GA		
McCormack; Ann Louise	Cumming	GA		
Martin; Timothy Ray	Alpharetta	GA		

US-CL-CURRENT: 604/370; 604/372, 604/378, 604/385.01

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#) [KWC](#) [Draw Desc](#) [Image](#)

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5. Document ID: US 6368444 B1

L11: Entry 5 of 29

File: USPT

Apr 9, 2002

US-PAT-NO: 6368444

DOCUMENT-IDENTIFIER: US 6368444 B1

TITLE: Apparatus and method for cross-directional stretching of polymeric film and other nonwoven sheet material and materials produced therefrom

DATE-ISSUED: April 9, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE ZIP CODE	COUNTRY
Jameson; Lee Kirby	Roswell	GA	
Kilpatrick; Diane Leilani	Bryan	TX	
Estey; Paul Windsor	Cumming	GA	
Fitts, Jr.; James Russell	Gainesville	GA	
Clark; Darryl Franklin	Alpharetta	GA	
Neely; James Richard	Alpharetta	GA	
Stokes; Ty Jackson	Suwanee	GA	
Schwartz; Robert John	Cumming	GA	

US-CL-CURRENT: 156/229; 156/324, 156/496, 264/288.8

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#) [KWC](#) [Draw Desc](#) [Image](#)

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6. Document ID: US H002011 H

L11: Entry 6 of 29

File: USPT

Jan 1, 2002

US-PAT-NO: H002011

DOCUMENT-IDENTIFIER: US H002011 H

TITLE: Absorbent garments with monolithic films having zoned breathability

DATE-ISSUED: January 1, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE ZIP CODE	COUNTRY
Freiburger; Sarah Jane Marie	Kaukauna	WI	
Fell; David Arthur	Neenah	WI	

US-CL-CURRENT: 604/381; 604/366, 604/378, 604/385.24

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">RMC</a>	<a href="#">Drawn Desc</a>	<a href="#">Image</a>
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 7. Document ID: US 6316687 B1

L11: Entry 7 of 29

File: USPT

Nov 13, 2001

US-PAT-NO: 6316687

DOCUMENT-IDENTIFIER: US 6316687 B1

TITLE: Disposable diaper having a humidity transfer region, Breathable zone panel and separation layer

DATE-ISSUED: November 13, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE ZIP CODE	COUNTRY
Davis; James Arthur	Roswell	GA	
Arnold; Karen Marie	Neenah	WI	
Eckhardt; Mary Beth	Cedar Hill	TX	
Kuepper; Rebecca Jean	Appleton	WI	
Mayberry; Pamela Jean	Appleton	WI	
Morman; Michael Tod	Alpharetta	GA	
Odorzyński; Thomas Walter	Green Bay	WI	
Zunker; MaryAnn	Oshkosh	WI	

US-CL-CURRENT: 604/372; 604/378, 604/385.01

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">RMC</a>	<a href="#">Drawn Desc</a>	<a href="#">Image</a>
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 8. Document ID: US 6309736 B1

L11: Entry 8 of 29

File: USPT

Oct 30, 2001

US-PAT-NO: 6309736

DOCUMENT-IDENTIFIER: US 6309736 B1

TITLE: Low gauge films and film/nonwoven laminates

DATE-ISSUED: October 30, 2001

## INVENTOR- INFORMATION:

NAME	CITY	STATE ZIP CODE	COUNTRY
McCormack; Ann Louise	Cumming	GA	
Hetzler; Kevin George	Alpharetta	GA	
English; Karen Lynn	Marketta	GA	
Jones, Jr.; Billy Ray	Cumming	GA	
Morell; Charles John	Roswell	GA	
Haffner; William Bela	Kennesaw	GA	
Walton; Glynis Allicia	Roswell	GA	
Garrett, Jr.; Lance James	Neenah	WI	

US-CL-CURRENT: 428/198; 428/315.5, 428/316.6, 442/370, 442/394,  
442/398[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[EUDOC](#) [Drawn Desc](#) [Image](#) 9. Document ID: US 6261674 B1

L11: Entry 9 of 29

File: USPT

Jul 17, 2001

US-PAT-NO: 6261674

DOCUMENT-IDENTIFIER: US 6261674 B1

TITLE: Breathable microlayer polymer film and articles including same

DATE-ISSUED: July 17, 2001

## INVENTOR- INFORMATION:

NAME	CITY	STATE ZIP CODE	COUNTRY
Branham; Kelly Dean	Lawrenceville	GA	
Topolkaraev; Vasily	Appleton	WI	
Soerens; Dave A.	Neenah	WI	

US-CL-CURRENT: 428/218; 428/315.5, 428/316.6, 442/370, 442/372,  
442/374, 442/375[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[EUDOC](#) [Drawn Desc](#) [Image](#) 10. Document ID: US 6248097 B1

L11: Entry 10 of 29

File: USPT

Jun 19, 2001

US-PAT-NO: 6248097

DOCUMENT-IDENTIFIER: US 6248097 B1

TITLE: Absorbent article with more conformable elastics

DATE-ISSUED: June 19, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE ZIP CODE	COUNTRY
Beitz; Mark John	Appleton	WI	
Bontrager; Monica Lynn	Appleton	WI	
Gossen; Barbara Ann	Oshkosh	WI	
Heikkinen; Chris Lee	Menasha	WI	
Hoo; Daniel	Appleton	WI	
Justmann; David Andrae	Hortonville	WI	
Keller; Richard Francis	Fremont	WI	
Nordness; Cynthia Helen	Oshkosh	WI	
Rammer; Douglas Paul	Appleton	WI	
Sallee; Lorry Francis	Pine River	WI	
St. Louis; Raymond Gerard	Fremont	WI	
VanEperen; David James	Appleton	WI	
Wyngaard; Cynthia Louise	Kaukauna	WI	
Yarbrough; Sandra Marie	Menasha	WI	
Zuleger; Roxanne Marie	Appleton	WI	
Friderich; Steven Scott	Alpharetta	GA	
Kepner; Eric Scott	Fletcher	NC	
Chang; Kuo-Shu Edward	Roswell	GA	

US-CL-CURRENT: 604/385.27; 604/358, 604/385.01, 604/385.28

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [References](#) [Sequences](#) [Attachments](#)[PubC](#) [Drawn Desc](#) [Image](#)

## □ 11. Document ID: US H001969 H

L11: Entry 11 of 29

File: USPT

Jun 5, 2001

US-PAT-NO: H001969

DOCUMENT-IDENTIFIER: US H001969 H

TITLE: Absorbent garments with microporous films having zoned breathability

DATE-ISSUED: June 5, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP	CODE	COUNTRY
Fell; David Arthur	Neenah	WI			
Freiburger; Sarah Jane Marie	Kaukauna	WI			
Renard; Keith Joseph	Oshkosh	WI			

US-CL-CURRENT: 604/367; 604/385.01, 604/385.24, 604/385.25

Full Title Citation Front Review Classification Date Reference Sequences Attachments

1200P | Draw Range | Images

12. Document ID: US 6238767 B1  
L11: Entry 12 of 29 File: USPT May 29, 2001

US-PAT-NO: 6238767  
DOCUMENT-IDENTIFIER: US 6238767 B1

TITLE: Laminate having improved barrier properties

DATE-ISSUED: May 29, 2001

**INVENTOR - INFORMATION:**

NAME	CITY	STATE	ZIP CODE	COUNTRY
McCormack; Ann Louise	Cumming	GA		
Haffner; William Bela	Kennesaw	GA		

US-CL-CURRENT: 428/99; 428/100, 428/516, 442/394, 604/370, 604/380, 604/384

Full Title Citation Front Review Classification Date Reference Sequences Attachments

### EDUCATIONAL LEVEL

13. Document ID: US 6191221 B1  
11: Entry 13 of 29 File: USPTO Feb 20, 2001

US-PAT-NO: 6191221  
DOCUMENT-IDENTIFIER: US 6191221 B1

**TITLE:** Breathable film compositions and articles and methods

DATE-ISSUED: February 20, 2001

**INVENTOR - INFORMATION:**

NAME	CITY	STATE	ZIP CODE	COUNTRY
McAmish; Larry	Cornelius	NC		
Huskey; Timothy	Suwانee	GA		

US-CL-CURRENT: 525/131; 525/173, 525/176

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[HTMLC](#) [Drawn Desc](#) [Image](#) 14. Document ID: US 6177607 B1

L11: Entry 14 of 29

File: USPT

Jan 23, 2001

US-PAT-NO: 6177607

DOCUMENT-IDENTIFIER: US 6177607 B1

TITLE: Absorbent product with nonwoven dampness inhibitor

DATE-ISSUED: January 23, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Blaney; Carol Ann	Roswell	GA		
McCormack; Ann Louis	Cumming	GA		
Paul; Susan Carol	Alpharetta	GA		

US-CL-CURRENT: 604/378; 442/370, 442/394, 442/398, 604/384,  
604/385.01, 604/385.26[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[HTMLC](#) [Drawn Desc](#) [Image](#) 15. Document ID: US 6171369 B1

L11: Entry 15 of 29

File: USPT

Jan 9, 2001

US-PAT-NO: 6171369

DOCUMENT-IDENTIFIER: US 6171369 B1

TITLE: Vacuum cleaner bag construction and method of operation

DATE-ISSUED: January 9, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Schultink; Bas	Overpelt			BEX
Schultink; Jan	Eksel			BEX

US-CL-CURRENT: 95/57; 15/347, 15/352, 55/382, 55/486, 55/487,  
55/DIG.2, 55/DIG.39, 95/287, 95/78, 96/15, 96/69[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[HTMLC](#) [Drawn Desc](#) [Image](#) 16. Document ID: US 6139912 A

L11: Entry 16 of 29

File: USPT

Oct 31, 2000

US-PAT-NO: 6139912

DOCUMENT-IDENTIFIER: US 6139912 A

TITLE: Method for intermittent application of particulate material

DATE-ISSUED: October 31, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE ZIP CODE	COUNTRY
Onuschak; Anthony David	Dayton	NJ	
Ydoate; Fernando	Flemington	NJ	

US-CL-CURRENT: 427/180; 222/1, 427/197[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[Draw](#) [Desc](#) [Image](#)

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 17. Document ID: US 6117438 A

L11: Entry 17 of 29

File: USPT

Sep 12, 2000

US-PAT-NO: 6117438

DOCUMENT-IDENTIFIER: US 6117438 A

TITLE: Water degradable microlayer polymer film and articles including same

DATE-ISSUED: September 12, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE ZIP CODE	COUNTRY
Topolkaraev; Vasily	Appleton	WI	
Soerens; Dave A.	Neenah	WI	
Branham; Kelly Dean	Lawrenceville	GA	

US-CL-CURRENT: 424/404; 424/400, 424/443[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[Draw](#) [Desc](#) [Image](#)

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 18. Document ID: US 6071450 A

L11: Entry 18 of 29

File: USPT

Jun 6, 2000

US-PAT-NO: 6071450

DOCUMENT-IDENTIFIER: US 6071450 A

TITLE: Method for making water degradable polymer microlayer film

DATE-ISSUED: June 6, 2000

INVENTOR- INFORMATION:

NAME	CITY	STATE ZIP CODE	COUNTRY
Topolkaraev; Vasily	Appleton	WI	
Soerens; Dave A.	Neenah	WI	
Branham; Kelly Dean	Lawrenceville	GA	

US-CL-CURRENT: 264/173.12, 264/173.14, 264/173.15, 264/173.16,  
264/173.19, 264/290.2

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [KMC](#) | [Drawn Desc](#) | [Image](#)

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19. Document ID: US 6045900 A

L11: Entry 19 of 29 File: USPT Apr 4, 2000

US-PAT-NO: 6045900

DOCUMENT-IDENTIFIER: US 6045900 A

TITLE: Breathable filled film laminate

DATE-ISSUED: April 4, 2000

INVENTOR- INFORMATION:

NAME	CITY	STATE ZIP CODE	COUNTRY
Haffner; William Bela	Kennesaw	GA	
McCormack; Ann Louise	Cumming	GA	

US-CL-CURRENT: 428/315.9, 428/316.6, 428/317.9, 428/332, 442/370,  
442/394, 442/398

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [KMC](#) | [Drawn Desc](#) | [Image](#)

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20. Document ID: US 6028017 A

L11: Entry 20 of 29 File: USPT Feb 22, 2000

US-PAT-NO: 6028017

DOCUMENT-IDENTIFIER: US 6028017 A

TITLE: High stretch breathable nonwoven textile composite

DATE-ISSUED: February 22, 2000

INVENTOR- INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Curtin; Patrick J.	Greenville	NC		
Day; Victor S.	Portsmouth	RI		
Russell; William E.	Middletown	RI		

US-CL-CURRENT: 442/370, 428/131, 428/137, 428/138, 428/304.4,  
428/309.9, 428/86, 442/374

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [HTML](#) | [Drawn Desc](#) | [Image](#)

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21. Document ID: US 6002064 A

L11: Entry 21 of 29

File: USPT

Dec 14, 1999

US-PAT-NO: 6002064

DOCUMENT-IDENTIFIER: US 6002064 A

TITLE: Stretch-thinned breathable films resistant to blood and virus penetration

DATE-ISSUED: December 14, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE ZIP CODE COUNTRY
Kobylykver; Peter Michailovich	Marietta	GA
Hetzler; Kevin George	Alpharetta	GA

US-CL-CURRENT: 604/367, 428/323, 428/327, 428/339, 604/358, 604/366

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [HTML](#) | [Drawn Desc](#) | [Image](#)

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22. Document ID: US 5752947 A

L11: Entry 22 of 29

File: USPT

May 19, 1998

US-PAT-NO: 5752947

DOCUMENT-IDENTIFIER: US 5752947 A

TITLE: Multiple folded side barrier for improved leakage protection

DATE-ISSUED: May 19, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Awolin; Bernhard	Rammsee			DEX

US-CL-CURRENT: 604/387, 604/385.04, 604/385.05

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[HTML](#) [Drawn Desc](#) [Image](#)

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 23. Document ID: US 5743273 A

L11: Entry 23 of 29

File: USPT

Apr 28, 1998

US-PAT-NO: 5743273

DOCUMENT-IDENTIFIER: US 5743273 A

TITLE: Method for making a surgical drape

DATE-ISSUED: April 28, 1998

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Newman; Charles L.	Stillwater	MN		

US-CL-CURRENT: 128/849; 128/853[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[HTML](#) [Drawn Desc](#) [Image](#)

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 24. Document ID: US 5706950 A

L11: Entry 24 of 29

File: USPT

Jan 13, 1998

US-PAT-NO: 5706950

DOCUMENT-IDENTIFIER: US 5706950 A

TITLE: Disposable diaper changing pack

DATE-ISSUED: January 13, 1998

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Houghton; Dawn Lynn Ilnicki	Appleton	WI		
Feyen; Jean Sandra	Appleton	WI		
Riddell; Wilfred Eugene	Neenah	WI		
Winkel; Paula Cardinahl	Chilton	WI		
Winter; Joseph Eric	Appleton	WI		

US-CL-CURRENT: 206/581; 206/440, 604/385.01[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[HTML](#) [Drawn Desc](#) [Image](#)

25. Document ID: US 5624427 A

L11: Entry 25 of 29

File: USPT

Apr 29, 1997

US-PAT-NO: 5624427

DOCUMENT-IDENTIFIER: US 5624427 A

TITLE: Female component for refastenable fastening device

DATE-ISSUED: April 29, 1997

## INVENTOR- INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bergman; Carl L.	Loveland	OH		
Dreier; Kimberly A.	Cincinnati	OH		
Robles; Miguel A.	Cincinnati	OH		
Roe; Donald C.	West Chester	OH		
Kline; Mark J.	Cincinnati	OH		
Hasse; Margaret H.	Cincinnati	OH		

US-CL-CURRENT: 604/391; 24/442, 428/105, 428/107, 428/109, 428/182[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[KMD](#) [Drawn Desc](#) [Image](#) 26. Document ID: US 5586563 A

L11: Entry 26 of 29

File: USPT

Dec 24, 1996

US-PAT-NO: 5586563

DOCUMENT-IDENTIFIER: US 5586563 A

TITLE: Method for making a surgical drape

DATE-ISSUED: December 24, 1996

## INVENTOR- INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Newman; Charles L.	Stillwater	MN		

US-CL-CURRENT: 128/849; 128/853[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[KMD](#) [Drawn Desc](#) [Image](#) 27. Document ID: US 5560974 A

L11: Entry 27 of 29

File: USPT

Oct 1, 1996

US-PAT-NO: 5560974

DOCUMENT-IDENTIFIER: US 5560974 A

TITLE: Breathable non-woven composite barrier fabric and fabrication process

DATE-ISSUED: October 1, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Langley; John D.	Guntersville	AL		

US-CL-CURRENT: 428/198; 128/849, 156/291, 156/73.1, 2/901, 422/34,  
428/315.5, 428/315.7, 428/315.9, 428/340, 442/398, 442/401

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#) [R&D](#) [Drawn Desc](#) [Image](#)

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28. Document ID: US 5503907 A

L11: Entry 28 of 29 File: USPT Apr 2, 1996

US-PAT-NO: 5503907

DOCUMENT-IDENTIFIER: US 5503907 A

TITLE: Barrier fabrics which incorporate multicomponent fiber support webs

DATE-ISSUED: April 2, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gessner; Scott L.	Encinitas	CA		
Gillespie; Jay D.	Simpsonville	SC		

US-CL-CURRENT: 428/198; 428/212, 428/903, 428/908.8, 442/346,  
442/364

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#) [R&D](#) [Drawn Desc](#) [Image](#)

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29. Document ID: US 4818600 A

L11: Entry 29 of 29 File: USPT Apr 4, 1989

US-PAT-NO: 4818600

DOCUMENT-IDENTIFIER: US 4818600 A

TITLE: Latex coated breathable barrier

DATE-ISSUED: April 4, 1989

## INVENTOR - INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Braun; Ralph V.	Roswell	GA		
Brown; Christine H.	Dunwoody	GA		
Fitting; Steven W.	Acworth	GA		
Garrett, Jr.; Lance J.	Marietta	GA		
Law; David C.	Roswell	GA		
Weber; Robert E.	Marietta	GA		

US-CL-CURRENT: 442/76, 428/334, 442/171, 442/400, 604/327, 604/330,  
604/335, 604/356, 604/358, 604/365, 604/366, 604/38

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)

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Term	Documents
(7 AND 2 AND 3).USPT,PGPB.	29
(L2 AND L3 AND L7).USPT,PGPB.	29

Display Format:

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WEST

[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 2 of 2 returned.** 1. Document ID: US 5503907 A

L10: Entry 1 of 2

File: USPT

Apr 2, 1996

US-PAT-NO: 5503907

DOCUMENT-IDENTIFIER: US 5503907 A

TITLE: Barrier fabrics which incorporate multicomponent fiber support webs

DATE-ISSUED: April 2, 1996

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gessner; Scott L.	Encinitas	CA		
Gillespie; Jay D.	Simpsonville	SC		

US-CL-CURRENT: 428/198; 428/212, 428/903, 428/908.8, 442/346,  
442/364[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[HTML](#) [Detail Desc](#) [Image](#) 2. Document ID: US 5368920 A

L10: Entry 2 of 2

File: USPT

Nov 29, 1994

US-PAT-NO: 5368920

DOCUMENT-IDENTIFIER: US 5368920 A

TITLE: Nonporous breathable barrier fabrics and related methods of manufacture

DATE-ISSUED: November 29, 1994

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Schortmann; Walter E.	Cumberland	RI		

US-CL-CURRENT: 442/76[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[HTML](#) [Detail Desc](#) [Image](#)

Term	Documents
(6 AND 7).USPT,PGPB.	2
(L6 AND L7).USPT,PGPB.	2

**Display Format:**[Previous Page](#)[Next Page](#)

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[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 2 of 2 returned.** 1. Document ID: US H002011 H

L8: Entry 1 of 2

File: USPT

Jan 1, 2002

US-PAT-NO: H002011

DOCUMENT-IDENTIFIER: US H002011 H

TITLE: Absorbent garments with monolithic films having zoned breathability

DATE-ISSUED: January 1, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE ZIP CODE	COUNTRY
Freiburger; Sarah Jane Marie	Kaukauna	WI	
Fell; David Arthur	Neenah	WI	

US-CL-CURRENT: 604/381; 604/366, 604/378, 604/385.24[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RWC](#) | [Drawn Desc](#) | [Image](#) 2. Document ID: US 6191221 B1

L8: Entry 2 of 2

File: USPT

Feb 20, 2001

US-PAT-NO: 6191221

DOCUMENT-IDENTIFIER: US 6191221 B1

TITLE: Breathable film compositions and articles and method

DATE-ISSUED: February 20, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
McAmish; Larry	Cornelius	NC		
Huskey; Timothy	Suwanee	GA		

US-CL-CURRENT: 525/131; 525/173, 525/176[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RWC](#) | [Drawn Desc](#) | [Image](#)

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Term	Documents
(7 AND 2 AND 5 AND 3).USPT,PGPB.	2
(L2 AND L3 AND L7 AND L5).USPT,PGPB.	2

Display Format:[CIT](#)[Change Format](#)[Previous Page](#)[Next Page](#)

## WEST

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## Search Results - Record(s) 1 through 2 of 2 returned.

1. Document ID: US 6257302 B1

L2: Entry 1 of 2

File: USPT

Jul 10, 2001

US-PAT-NO: 6257302

DOCUMENT-IDENTIFIER: US 6257302 B1

TITLE: Solar-energy siding system and assembly

DATE-ISSUED: July 10, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bednarczyk; Adam	Streamwood	IL	60107	
Bednarczyk; Anna	Warsaw			PLX

US-CL-CURRENT: 160/98

## ABSTRACT:

A solar-energy siding system is employed by affixing it to an exterior building surface. The system has a transparent siding element, a laminate having at least two spaced-apart ply members, a reflective member having a first orientation substantially between the siding element and the laminate, and a second orientation substantially removed from the area between the siding element and the laminate, and a mechanism for translating the reflective member between the first and the second orientations. The ply members include at least one inner light-absorbing ply member and one outer transparent ply member. The ply members each include a plurality of spacer ribs and the spacer ribs of the inner ply member are disposed crosswise of, and bear against, the spacer ribs of the outer ply member.

12 Claims, 12 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 4

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[KWD](#) [Drawn Desc](#) [Image](#)

2. Document ID: US 5888614 A

L2: Entry 2 of 2

File: USPT

Mar 30, 1999

US-PAT-NO: 5888614DOCUMENT-IDENTIFIER: US 5888614 A

TITLE: Microperforated strength film for use as an anti-infiltration barrier

DATE-ISSUED: March 30, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Slocum; Donald H.	Morristown	NJ	07960	
Healey; Daniel P.	Brielle	NJ		

US-CL-CURRENT: 428/132; 156/164, 156/209, 156/244.18, 156/244.19, 156/250, 156/252, 156/253, 428/105, 428/131, 428/137, 428/182, 428/220, 428/338, 428/913, 52/408, 52/746.1, 83/30, 83/347

## ABSTRACT:

A house wrap film product includes a laminated poly film with a first poly film ply and a second poly film ply and micropuncture formed in the laminated poly film to allow vapor transmission from a first side of the laminated poly film to a second side of the laminated poly film. Each of the poly plies is formed of a spiral cut film having a first ply with a first orientation and a second ply having a second orientation, the first orientation being at an angle with respect to an edge of said film and said second orientation being at an angle with respect to an edge of said film, said first ply and said second ply being laminated together cross oriented such that said first orientation extends in a different direction from said second orientation. The micropuncture provides a deformed region of said film, surrounding said hole. A method is provided for forming the house wrap product.

20 Claims, 14 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 6

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#)[EPOC](#) [Draw Desc](#) [Image](#)[Generate Collection](#)[Print](#)

Term	Documents
"5888614".USPT.	2
5888614S	0
"5888614".USPT.	2
(5888614).USPT.	2

**Display Format:**

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# WEST Search History

DATE: Sunday, August 25, 2002

## Set Name Query

side by side

*DB=USPT,PGPB; PLUR=YES; OP=ADJ*

		<u>Hit Count</u>	<u>Set Name</u>
			result set
L17	15 and 16 and 17	5	L17
L16	11 and 12 and 15 and 16 and 17	0	L16
L15	12 and 113	3	L15
L14	111 and 113	0	L14
L13	16 and 17	33	L13
L12	12 and 111	9	L12
L11	housewrap or house\$1wrap	75	L11
L10	permeability same water vapor	2812	L10
L9	impermeability same (liquid or water or air)	2819	L9
L8	L7	20382	L8
L7	acrylate same polyester	20382	L7
L6	breathable same coating	469	L6
L5	monolithic	40179	L5
L4	(non\$1woven or un\$1woven) same layer	16100	L4
L3	spunbond same polypropylene	1122	L3
L2	spunbond same polypropylene same (non\$1woven or un\$1woven) same layer	399	L2
L1	laminate same material	42916	L1

END OF SEARCH HISTORY

# WEST Search History

DATE: Sunday, August 25, 2002

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
side by side		result set	
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L23	l5 and l6 and l20	9	L23
L22	l6 and l18	0	L22
L21	l6 and l18 and l20	0	L21
L20	copolyester or (copolyether\$1ester or copolyester\$1ester block copolymer)	8844	L20
L19	copolyester or (copolyether\$1ester or copolyester\$1ester block copolymer) 4	8669	L19
L18	copolymer same (ethylmethylacrylate or ethylbutylacrylate or ethylvinylacrylate)	18	L18
L17	l5 and l6 and l7	5	L17
L16	l1 and l2 and l5 and l6 and l7	0	L16
L15	l2 and l13	3	L15
L14	l11 and l13	0	L14
L13	l6 and l7	33	L13
L12	l2 and l11	9	L12
L11	housewrap or house\$1wrap	75	L11
L10	permeability same water vapor	2812	L10
L9	impermeability same (liquid or water or air)	2819	L9
L8	L7	20382	L8
L7	acrylate same polyester	20382	L7
L6	breathable same coating	469	L6
L5	monolithic	40179	L5
L4	(non\$1woven or un\$1woven) same layer	16100	L4
L3	spunbond same polypropylene	1122	L3
L2	spunbond same polypropylene same (non\$1woven or un\$1woven) same layer	399	L2
L1	laminate same material	42916	L1

END OF SEARCH HISTORY

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## Search Results - Record(s) 1 through 4 of 4 returned.

1. Document ID: US 6070635 A

L1: Entry 1 of 4

File: USPT

Jun 6, 2000

US-PAT-NO: 6070635

DOCUMENT-IDENTIFIER: US 6070635 A

TITLE: Nonwoven sheet products made from plexifilamentary film  
fibril webs

DATE-ISSUED: June 6, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE ZIP CODE	COUNTRY
Franke; Ralph A.	Richmond	VA	
Lim; Hyun S.	Chesterfield	NJ	
Milone; Michael P.	Elmer	NJ	
Raty; R. Gail	Wilmington	DE	
Vaidyanathan; Akhileswar G.	Hockessin	DE	

US-CL-CURRENT: 156/378; 264/40.1, 378/86, 378/88, 382/141

## ABSTRACT:

This invention relates to improved sheet products and specifically to improved nonwoven sheet products made from highly oriented plexifilamentary film-fibril webs. The improved sheet products have high opacity and strength with a much wider range of porosity or Gurley Hill Porosity Values. In particular, sheet products made in accordance with the present invention have considerably higher Gurley Hill Porosity Values than similar weight sheet products subject to the same finishing treatments in accordance with prior known sheet materials. Similarly, sheet products made in accordance with the present invention can be made which have much lower Gurley Hill Porosity Values than prior sheet materials. The invention includes numerous methods and data characterizing the webs and sheets that form the improved sheet materials.

3 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 3

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWD	Draft Desc	Image
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2. Document ID: US 6046118 A

L1: Entry 2 of 4

File: USPT

Apr 4, 2000

US-PAT-NO: 6046118

DOCUMENT-IDENTIFIER: US 6046118 A

TITLE: Composite sheet material

DATE-ISSUED: April 4, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jones; David C.	Midlothian	VA		
Rudys; Stasys K.	Midlothian	VA		

US-CL-CURRENT: 442/57; 442/382, 442/389

## ABSTRACT:

A breathable composite sheet material includes a first layer of flash-spun polyethylene plexifilamentary film-fibril sheet and a second layer of a thermoplastic open mesh fabric thermally laminated to the first layer. The composite sheet has an average tensile strength and an average grab tensile strength that are each at least 10% greater than the sum of the tensile and grab strengths of the first and second layers. The average tensile strength of the composite sheet after exposure to 400 mJ/m.<sup>2</sup> of ultraviolet light is at least 65% of the tensile strength of the sheet before any substantial exposure to ultraviolet light.

6 Claims, 3 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 2

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">Claims</a>	<a href="#">POMC</a>	<a href="#">Drawn Desc</a>	<a href="#">Image</a>
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 3. Document ID: US 5888614 A

L1: Entry 3 of 4

File: USPT

Mar 30, 1999

US-PAT-NO: 5888614

DOCUMENT-IDENTIFIER: US 5888614 A

TITLE: Microperforated strength film for use as an anti-infiltration barrier

DATE-ISSUED: March 30, 1999

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Slocum; Donald H.	Morristown	NJ	07960	
Healey; Daniel P.	Brielle	NJ		

US-CL-CURRENT: 428/132, 156/164, 156/209, 156/244.18, 156/244.19,  
156/250, 156/252, 156/253, 428/105, 428/131, 428/137, 428/182,  
428/220, 428/338, 428/913, 52/408, 52/746.1, 83/30, 83/347

**ABSTRACT:**

A house wrap film product includes a laminated poly film with a first poly film ply and a second poly film ply and micropuncture formed in the laminated poly film to allow vapor transmission from a first side of the laminated poly film to a second side of the laminated poly film. Each of the poly plies is formed of a spiral cut film having a first ply with a first orientation and a second ply having a second orientation, the first orientation being at an angle with respect to an edge of said film and said second orientation being at an angle with respect to an edge of said film, said first ply and said second ply being laminated together cross oriented such that said first orientation extends in a different direction from said second orientation. The micropuncture provides a deformed region of said film, surrounding said hole. A method is provided for forming the house wrap product.

20 Claims, 14 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 6

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [KMD](#) | [Draw Desc](#) | [Image](#)

4. Document ID: US 5863639 A

L1: Entry 4 of 4

File: USPT

Jan 26, 1999

US-PAT-NO: 5863639

DOCUMENT-IDENTIFIER: US 5863639 A

TITLE: Nonwoven sheet products made from plexifilamentary film fibril webs

DATE-ISSUED: January 26, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE ZIP CODE	COUNTRY
Franke; Ralph A.	Richmond	VA	
Lim; Hyun S.	Chesterfield	VA	
Marshall; Larry Ray	Chesterfield	VA	
Milone; Michael P.	Elmer	NJ	
Raty; R. Gail	Wilmington	DE	
Vaidyanathan; Akhileswar G.	Hockessin	DE	

US-CL-CURRENT: 428/198, 324/71.1, 356/431, 428/212, 428/218,  
428/219, 428/315.5, 428/903, 442/334, 73/159

**ABSTRACT:**

This invention relates to improved sheet products and specifically to improved nonwoven sheet products made from highly oriented plexifilamentary film-fibril webs. The improved sheet products have high opacity and strength with a much wider range of porosity or Gurley Hill Porosity Values. In particular, sheet products made in accordance with the present invention have considerably higher Gurley Hill Porosity Values than similar weight sheet products subject to the same finishing treatments in accordance with prior known sheet materials. Similarly, sheet products made in accordance with the present invention can be made which have much lower Gurley Hill Porosity Values than prior sheet materials. The invention includes numerous methods and data characterizing the webs and sheets that form the improved sheet materials.

20 Claims, 4 Drawing figures

Exemplary Claim Number: 1,9

Number of Drawing Sheets: 3

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [HTML](#) | [Drawn Desc](#) | [Image](#)

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L1: Entry 1 of 12

File: USPT

Oct 17, 2000

US-PAT-NO: 6133168

DOCUMENT-IDENTIFIER: US 6133168 A

TITLE: Coated substrate having high MVTR

DATE-ISSUED: October 17, 2000

2

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Doyle, Robert E.	Adrian	MI		
Fahmy, Mohamed A.	Kalamazoo	MI		
Moore, James G.	Jacksonville	FL		

US-CL-CURRENT: 442/76; 428/315.5, 428/315.9, 442/164, 442/77

## ABSTRACT:

A coated substrate having an MVTR greater than about 5 perms comprises a substrate, a monolithic, extrusion coated breathable polymer layer, and a primer layer intermediate and adhered to the substrate and the monolithic, extrusion coated breathable polymer layer.

8 Claims, 0 Drawing figures  
Exemplary Claim Number: 1

[Full](#) | [Table](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KOMC](#) | [Drawn Desc](#) | [Image](#)

 **2. Document ID: US 6070635 A**

L1: Entry 2 of 12

File: USPT

Jun 6, 2000

US-PAT-NO: 6070635

DOCUMENT-IDENTIFIER: US 6070635 A

TITLE: Nonwoven sheet products made from plexifilamentary film fibril webs

DATE-ISSUED: June 6, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Franke; Ralph A.	Richmond	VA		
Lim; Hyun S.	Chesterfield	NJ		
Milone; Michael P.	Elmer	NJ		
Raty; R. Gail	Wilmington	DE		
Vaidyanathan; Akhileswar G.	Hockessin	DE		

US-CL-CURRENT: 156/378; 264/40.1, 378/86, 378/88, 382/141

ABSTRACT:

This invention relates to improved sheet products and specifically to improved nonwoven sheet products made from highly oriented plexifilamentary film-fibril webs. The improved sheet products have high opacity and strength with a much wider range of porosity or Gurley Hill Porosity Values. In particular, sheet products made in accordance with the present invention have considerably higher Gurley Hill Porosity Values than similar weight sheet products subject to the same finishing treatments in accordance with prior known sheet materials. Similarly, sheet products made in accordance with the present invention can be made which have much lower Gurley Hill Porosity Values than prior sheet materials. The invention includes numerous methods and data characterizing the webs and sheets that form the improved sheet materials.

3 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 3

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Rearview](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RMDC](#) | [Draw Desc](#) | [Image](#)

3. Document ID: US 5972147 A

L1: Entry 3 of 12

File: USPT

Oct 26, 1999

US-PAT-NO: 5972147

DOCUMENT-IDENTIFIER: US 5972147 A

TITLE: Method of making fibrous, bonded polyolefin sheet

DATE-ISSUED: October 26, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Janis; Rudolph F.	Richmond	VA		

US-CL-CURRENT: 156/181; 156/166, 156/229, 156/296, 156/308.2

ABSTRACT:

A process is provided for producing a bonded nonwoven sheet from a lightly consolidated fibrous polyolefin sheet wherein the sheet is preheated on one or more preheating rolls, is bonded in one or more calendering nips, and is cooled on one or more cooling rolls. The process is used to make bonded polyolefin fibrous sheets that are smooth, are substantially impermeable to air and water, and are moisture vapor permeable.

11 Claims, 2 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 1

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [AMC](#) | [Draw Desc](#) | [Image](#)

## □ 4. Document ID: US 5863639 A

L1: Entry 4 of 12

File: USPT

Jan 26, 1999

US-PAT-NO: 5863639

DOCUMENT-IDENTIFIER: US 5863639 A

TITLE: Nonwoven sheet products made from plexifilamentary film fibril webs

DATE-ISSUED: January 26, 1999

### INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Franke; Ralph A.	Richmond	VA		
Lim; Hyun S.	Chesterfield	VA		
Marshall; Larry Ray	Chesterfield	VA		
Milone; Michael P.	Elmer	NJ		
Raty; R. Gail	Wilmington	DE		
Vaidyanathan; Akhileswar G.	Hockessin	DE		

US-CL-CURRENT: 428/198; 324/71.1, 356/431, 428/212, 428/218, 428/219, 428/315.5,  
428/903, 442/334, 73/159

### ABSTRACT:

This invention relates to improved sheet products and specifically to improved nonwoven sheet products made from highly oriented plexifilamentary film-fibril webs. The improved sheet products have high opacity and strength with a much wider range of porosity or Gurley Hill Porosity Values. In particular, sheet products made in accordance with the present invention have considerably higher Gurley Hill Porosity Values than similar weight sheet products subject to the same finishing treatments in accordance with prior known sheet materials. Similarly, sheet products made in accordance with the present invention can be made which have much lower Gurley Hill Porosity Values than prior sheet materials. The invention includes numerous methods and data characterizing the webs and sheets that form the improved sheet materials.

20 Claims, 4 Drawing figures

Exemplary Claim Number: 1,9

Number of Drawing Sheets: 3

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)

[AMC](#) | [Draw Desc](#) | [Image](#)

## □ 5. Document ID: US 5773123 A

L1: Entry 5 of 12

File: USPT

Jun 30, 1998

US-PAT-NO: 5773123

DOCUMENT-IDENTIFIER: US 5773123 A

TITLE: Air infiltration barrier laminate

DATE-ISSUED: June 30, 1998

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Anwyll, Jr.; James	Ponte Veda Beach	FL		

US-CL-CURRENT: 428/137; 442/290

ABSTRACT:

An air infiltration barrier laminate comprises a perforated laminate made from a woven polyolefin fabric, a resin, and a polyolefin film.

10 Claims, 1 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 1

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Reviews](#) | [Classification](#) | [Date](#) | [References](#) | [Sequences](#) | [Attachments](#)

[RDM](#) | [Draw Desc](#) | [Image](#)

6. Document ID: US 5593771 A

LI: Entry 6 of 12

File: USPT

Jan 14, 1997

US-PAT-NO: 5593771

DOCUMENT-IDENTIFIER: US 5593771 A

TITLE: Barrier laminate and method using a portable carrier for sealing gaps in building construction

DATE-ISSUED: January 14, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lawless; Joseph D.	Bloomington	MN		
Heil; Robert H.	New Richmond	WI		
Pribnow; Scott R.	Woodbury	MN		
Russell; Duncan R.	North Oaks	MN		

US-CL-CURRENT: 428/317.3; 156/157, 156/324, 156/71, 428/126, 428/317.5, 428/351,  
428/354, 428/41.9, 428/58

ABSTRACT:

A barrier laminate for attachment to the outer surface of a structure, such as a house prior to attachment of its siding, to cover joints between structural members assembled to form the structure. The barrier laminate comprises a flexible elongate barrier layer having minute passageways between its major surfaces affording passage of water vapor while restricting the passage of liquid water and air between its major surfaces. A portable carrier having a pair of hubs engaging a roll of the barrier laminate and having a pair of trailing rollers which may be used to adhere exposed layers of pressure sensitive adhesive along each of the opposite edges of the barrier layer to structural members on opposite sides of a joint therebetween.

15 Claims, 25 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 11

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)[Word](#) | [Draw Desc](#) | [Image](#)

## 7. Document ID: US 5503907 A

L1: Entry 7 of 12

File: USPT

Apr 2, 1996

US-PAT-NO: 5503907

DOCUMENT-IDENTIFIER: US 5503907 A

TITLE: Barrier fabrics which incorporate multicomponent fiber support webs

DATE-ISSUED: April 2, 1996

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gessner, Scott L.	Encinitas	CA		
Gillespie, Jay D.	Simpsonville	SC		

US-CL-CURRENT: 428/198; 428/212, 428/903, 428/908.8, 442/346, 442/364

## ABSTRACT:

A composite nonwoven fabric having at least one hydrophobic microporous layer and at least one other layer formed of multicomponent fibers. The multicomponent fibers comprise a lower melting thermoplastic resin component and one or more higher melting thermoplastic resin components, wherein a substantial proportion of the surfaces of the multicomponent fibers consists of the lower melting thermoplastic resin component. The microporous layer is composed in substantial part of at least one thermoplastic resin which is thermally miscible with and adherent, upon thermal activation, to the lower melting thermoplastic resin component of the multicomponent fibers. The layers are laminated together such that the lower melting thermoplastic resin component of the layer of multicomponent fibers is thermally bonded to the thermally miscible thermoplastic resin component of the hydrophobic microporous layer to form a unitary, cohesive bond combining the layers, and wherein at least one of the higher melting thermoplastic resin components retains a fiber-like integrity in the multicomponent fibers to impart strength to the laminated nonwoven fabric.

18 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 1

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)[Word](#) | [Draw Desc](#) | [Image](#)

## 8. Document ID: US 5494745 A

L1: Entry 8 of 12

File: USPT

Feb 27, 1996

US-PAT-NO: 5494745

DOCUMENT-IDENTIFIER: US 5494745 A

TITLE: Laminated film and method for making a laminated film

DATE-ISSUED: February 27, 1996

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Vander Velden; Rudolph	Macedon	NY		
Weber; Ralph J.	Fairport	NY		

US-CL-CURRENT: 428/354; 156/297, 156/300, 428/315.9, 428/483, 428/516, 428/520,  
428/523, 442/290, 442/398, 525/222, 525/228, 525/330.3

## ABSTRACT:

A multilayer laminated structure comprising an olefin film, preferably a polypropylene film having on a first side, of the olefin film, a highly printable blend of (A) alkylene acrylate copolymer and (B) an interpolymer of an alkyl acrylate, an alkyl methacrylate and an alkyl acrylate acid and a woven or nonwoven reinforcement laminated to a second side of the olefin film. The laminated structure is suitable for envelope stock, packaging film and label stock.

21 Claims, 1 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments |

Home | Draw Desc | Image |

9. Document ID: US 5403444 A

L1: Entry 9 of 12

File: USPT

Apr 4, 1995

US-PAT-NO: 5403444

DOCUMENT-IDENTIFIER: US 5403444 A

TITLE: Printable, high-strength, tear-resistant nonwoven material and related method of manufacture

DATE-ISSUED: April 4, 1995

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Goettmann; James A.	North East	PA		
Boylan; John R.	Newtown	PA		

US-CL-CURRENT: 162/146; 162/157.3, 162/206, 162/207

## ABSTRACT:

A nonwoven composite web consists of 15 to 50 wt. % of first polyester fibers having a length of 5 mm to 3/4 inch and a denier of 0.3 to 3, 5 to 50 wt. % of second polyester fibers having a length of 5 mm to 1-1/2 inches and a denier of 3 to 15, and 10 to 40 wt. % of binder fibers comprising thermoplastic binder material having a melting temperature which is less than the first and second melting temperatures respectively. The first and second polyester fibers are bonded to each other at least in part by solidification of the thermoplastic binder material after subjecting the web to temperatures in excess of the melting temperature of the binder material but not in excess of the melting temperature of either the first or second polyester fibers. In particular, the web is thermally bonded by calendaring at a temperature of in the range of 360.degree. to 410.degree. F. and at a pressure in the range of 40 to 70 psi. Preferably the binder fibers comprise bicomponent

fibers having a co-polyester sheath and a polyester core.

17 Claims, 9 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 9

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)

[AMC](#) | [Draw Desc](#) | [Image](#)

## 10. Document ID: US 5308691 A

L1: Entry 10 of 12

File: USPT

May 3, 1994

US-PAT-NO: 5308691

DOCUMENT-IDENTIFIER: US 5308691 A

TITLE: Controlled-porosity, calendered spunbonded/melt blown laminates

DATE-ISSUED: May 3, 1994

### INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lim; Hyun S.	Chesterfield	VA		
Shin; Hyunkook	Wilmington	DE		

US-CL-CURRENT: 442/345; 156/167, 156/308.2, 156/62.2, 156/62.4, 156/62.6, 428/903,  
442/382

### ABSTRACT:

Controlled porosity composite sheets comprising a melt-blown polypropylene fiber web having a spunbonded polypropylene fiber sheet laminated to at least one side thereof are made by calendering an assembly of the component webs in such a manner that, when a two-layer composite sheet is made, the web of melt-blown fibers is in contact with a metal roll heated to 140.degree.-170.degree. C. operating against an unheated resilient roll; and, when a three-layer composite sheet is made, the spunbonded web in contact with the heated metal roll has a dtex per fiber value of less than 6.

These composite sheets have a Gurley-Hill porosity of about 5-75 seconds, excellent mechanical and tear strengths, high water vapor penetration rate, and low liquid water permeability. They are particularly suitable for making housewrap sheets and sheets for sterile packaging. In the sterile packaging field, they are significantly better than medical paper used for the same purpose.

13 Claims, 2 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 1

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)

[AMC](#) | [Draw Desc](#) | [Image](#)

## 11. Document ID: US 4929303 A

L1: Entry 11 of 12

File: USPT

May 29, 1990

US-PAT-NO: 4929303

DOCUMENT-IDENTIFIER: US 4929303 A

TITLE: Composite breathable housewrap films

DATE-ISSUED: May 29, 1990

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sheth; Pares J.	Sugarland	TX		

US-CL-CURRENT: 156/209; 156/219, 156/244.11, 156/244.24, 156/309.6, 156/309.9,  
264/173.1, 264/284, 264/DIG.62

ABSTRACT:

Composite breathable film comprising a breathable polyolefin film heat laminated to a nonwoven HDPE fabric. Preferably, the breathable film is prepared by melt embossing a highly filled polyolefin film to impose a pattern of different film thickness therein, and stretching the embossed film. The nonwoven fabric is made by cross-laminating HDPE fibers at the crossing points to form a thin open mesh fabric, and coextruding a heat seal layer thereon. The composite is made by heat laminating the breathable film to the heat seal layer of the fabric. The resulting laminate has excellent water vapor transmissibility, air resistance and strength and is particularly adapted for use as a housewrap.

17 Claims, 0 Drawing figures  
Exemplary Claim Number: 11

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [DOC](#) | [Draw Desc](#) | [Image](#)

12. Document ID: US 4900619 A

L1: Entry 12 of 12

File: USPT

Feb 13, 1990

US-PAT-NO: 4900619

DOCUMENT-IDENTIFIER: US 4900619 A

TITLE: Translucent housewrap

DATE-ISSUED: February 13, 1990

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ostrowski; Henry S.	Greenville	SC		
Goodwin; Roy D.	Greenville	SC		
Jackson; William C.	Travelers Rest	SC		
Gillespie; Jay D.	Greenville	SC		

US-CL-CURRENT: 442/382; 156/296, 156/308.2, 156/62.8, 428/219, 428/903

ABSTRACT:

A translucent nonwoven fabric composite, suitable for use as a housewrap, is disclosed. The composite comprises a meltblown fabric layer laminated to a reinforcing fabric layer and may include tacking strips. The composite may be prepared by calendering a meltblown fabric and a reinforcing fabric together in a nip equipped with a resilient roll.

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L12: Entry 1 of 9

File: PGPB

Aug 8, 2002

PGPUB-DOCUMENT-NUMBER: 20020106959  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020106959 A1

TITLE: Composite sheet material

PUBLICATION-DATE: August 8, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Huffines, Prentice Lee	Old Hickory	TN	US	
Lim, Hyun Sung	Midlothian	VA	US	
Martin, Oscar L. JR.	Hermitage	TN	US	
Suh, Hageun	Nashville	TN	US	

US-CL-CURRENT: 442/394; 442/327, 442/381, 442/395, 442/396

## ABSTRACT:

A moisture vapor permeable, substantially liquid impermeable composite sheet material comprising a moisture vapor permeable monolithic polymeric film having a first side and a second side, a first nonwoven layer comprising a moisture vapor permeable powder-bonded nonwoven layer, said powder-bonded layer comprising a nonwoven web of fibers, wherein greater than 95 weight percent of the fibers in the nonwoven web are compatible with said polymeric film, said first nonwoven layer being adhered to the first side of the polymeric film by extrusion of said film onto said first nonwoven layer, and an optional second moisture vapor permeable nonwoven layer adhered to the second side of the film.

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RQMD](#) | [Drawn Desc](#) | [Image](#) **2. Document ID: US 6220388 B1**

L12: Entry 2 of 9

File: USPT

Apr 24, 2001

US-PAT-NO: 6220388  
DOCUMENT-IDENTIFIER: US 6220388 B1

TITLE: Acoustical insulation panel

DATE-ISSUED: April 24, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sanborn; David M	Downers Grove	IL		

US-CL-CURRENT: 181/290; 181/292, 181/294

## ABSTRACT:

An acoustical insulation panel to absorb and attenuate sound energy comprising an inner core including a plurality of cells formed therein and an outer membrane disposed on each side of the inner core to cooperatively form a plurality of sound attenuating chambers, each outer membrane includes an inner substrate of nonwoven meltblown microfiber acoustical absorbing fabric extending into each of the plurality of cells to cooperatively form the corresponding sound attenuating chamber therebetween and an outer facing to protect the corresponding inner substrate of nonwoven meltblown microfiber acoustical absorbing fabric.

29 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 4

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [References](#) | [Sequencies](#) | [Attachments](#) | [Claims](#) | [RMD](#) | [Draw Desc](#) | [Image](#)

3. Document ID: US 5594070 A

L12: Entry 3 of 9

File: USPT

Jan 14, 1997

US-PAT-NO: 5594070

DOCUMENT-IDENTIFIER: US 5594070 A

TITLE: Oriented polymeric microporous films

DATE-ISSUED: January 14, 1997

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jacoby; Philip	Naperville	IL		
Bauer; Charles W.	Batavia	IL		
Clingman; Scott R.	Glen Ellyn	IL		
Tapp; William T.	Marietta	GA		

US-CL-CURRENT: 525/88; 525/240

## ABSTRACT:

Polyolefin resin compositions and oriented microporous films prepared from same comprising an ethylene-propylene block copolymer having an ethylene content of about 10 to about 50 wt %, a propylene homopolymer or random propylene copolymer having up to about 10 wt % of a comonomer of ethylene or an  $\alpha$ -olefin of 4 to 8 carbon atoms, and components selected from a low molecular weight polypropylene, a beta-spherulite nucleating agent and an inorganic filler, and to processes for forming such films wherein the microporous films have improved breathability, strength, toughness and break elongation.

6 Claims, 1 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 1

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">Claims</a>	<a href="#">RWC</a>	<a href="#">Draw Desc</a>	<a href="#">Image</a>
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4. Document ID: US 5503907 A

L12: Entry 4 of 9

File: USPT

Apr 2, 1996

US-PAT-NO: 5503907

DOCUMENT-IDENTIFIER: US 5503907 A

TITLE: Barrier fabrics which incorporate multicomponent fiber support webs

DATE-ISSUED: April 2, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gessner, Scott L.	Encinitas	CA		
Gillespie, Jay D.	Simpsonville	SC		

US-CL-CURRENT: 428/198; 428/212, 428/903, 428/908.8, 442/346, 442/364

ABSTRACT:

A composite nonwoven fabric having at least one hydrophobic microporous layer and at least one other layer formed of multicomponent fibers. The multicomponent fibers comprise a lower melting thermoplastic resin component and one or more higher melting thermoplastic resin components, wherein a substantial proportion of the surfaces of the multicomponent fibers consists of the lower melting thermoplastic resin component. The microporous layer is composed in substantial part of at least one thermoplastic resin which is thermally miscible with and adherent, upon thermal activation, to the lower melting thermoplastic resin component of the multicomponent fibers. The layers are laminated together such that the lower melting thermoplastic resin component of the layer of multicomponent fibers is thermally bonded to the thermally miscible thermoplastic resin component of the hydrophobic microporous layer to form a unitary, cohesive bond combining the layers, and wherein at least one of the higher melting thermoplastic resin components retains a fiber-like integrity in the multicomponent fibers to impart strength to the laminated nonwoven fabric.

18 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 1

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>
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5. Document ID: US 5317035 A

L12: Entry 5 of 9

File: USPT

May 31, 1994

US-PAT-NO: 5317035

DOCUMENT-IDENTIFIER: US 5317035 A

TITLE: Oriented polymeric microporous films

DATE-ISSUED: May 31, 1994

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jacoby; Philip	Naperville	IL		
Bauer; Charles W.	Batavia	IL		
Clingman; Scott R.	Glen Ellyn	IL		
Tapp; William T.	Marietta	GA		

US-CL-CURRENT: 521/143; 524/427, 525/191, 525/95

ABSTRACT:

Polyolefin resin compositions and oriented microporous films prepared from same comprising an ethylene-propylene block copolymer having an ethylene content of about 10 to about 50 wt %, a propylene homopolymer or random propylene copolymer having up to about 10 wt % of a comonomer of ethylene or an  $\alpha$ -olefin of 4 to 8 carbon atoms, a low molecular weight polypropylene, a beta-spherulite nucleating agent and an inorganic filler. The microporous films have improved breathability, strength, toughness and break elongation.

7 Claims, 1 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 1

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [DOC](#) | [Draw Desc](#) | [Image](#)

6. Document ID: US 5236963 A

L12: Entry 6 of 9

File: USPT

Aug 17, 1993

US-PAT-NO: 5236963

DOCUMENT-IDENTIFIER: US 5236963 A

TITLE: Oriented polymeric microporous films

DATE-ISSUED: August 17, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jacoby; Philip	Naperville	IL		
Tapp; William T.	Marietta	GA		

US-CL-CURRENT: 521/92; 521/134, 524/427, 524/505, 524/515, 525/240, 525/88

ABSTRACT:

This invention relates to polymeric compositions capable of being converted into oriented microporous films having microvoid cells, interconnecting pores between the cells, and improved elongation, softness and tear strength, comprising an ethylene-propylene block copolymer having an ethylene content of about 10 to about 50 wt %, a low flexural modulus propylene-based polymer, a propylene homopolymer or copolymer having up to about 10 wt % of a comonomer of ethylene or an  $\alpha$ -olefin of 4 to 8 carbon atoms, an inorganic filler such as calcium carbonate, a beta-spherulite nucleating agent, and optionally, a low molecular weight polypropylene and to microporous films formed from such compositions.

4 Claims, 0 Drawing figures  
Exemplary Claim Number: 1

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [RMD](#) | [Draw Desc](#) | [Image](#)

7. Document ID: US 5208098 A

L12: Entry 7 of 9

File: USPT

May 4, 1993

US-PAT-NO: 5208098

DOCUMENT-IDENTIFIER: US 5208098 A

TITLE: Self-bonded nonwoven web and porous film composites

DATE-ISSUED: May 4, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Stover; Walter H.	Marietta	GA		

US-CL-CURRENT: 442/398; 428/171, 428/172

ABSTRACT:

A self-bonded nonwoven web and porous film composite comprising at least one layer of a self-bonded, fibrous nonwoven web comprising substantially continuous filaments adhered to at least one layer of a polymeric porous film and having vapor-permeable and liquid-impermeable properties.

17 Claims, 2 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 2

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [RMD](#) | [Draw Desc](#) | [Image](#)

8. Document ID: US 5182162 A

L12: Entry 8 of 9

File: USPT

Jan 26, 1993

US-PAT-NO: 5182162

DOCUMENT-IDENTIFIER: US 5182162 A

TITLE: Self-bonded nonwoven web and net-like web composites

DATE-ISSUED: January 26, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Andrusko; Frank G.	Alpharetta	GA		

US-CL-CURRENT: 428/219; 264/DIG.81, 428/138, 428/332, 428/340, 428/474.4, 428/475.2,  
428/480, 428/482, 428/95, 442/35

## ABSTRACT:

A self-bonded nonwoven web and thermoplastic net-like web composite comprising at least one layer of a uniform basis weight self-bonded, fibrous nonwoven web and at least one layer of a thermoplastic net-like web for producing stable fabric useful for carpet backing and packaging applications.

20 Claims, 2 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 2

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)

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## 9. Document ID: US 5176953 A

L12: Entry 9 of 9

File: USPT

Jan 5, 1993

US-PAT-NO: 5176953

DOCUMENT-IDENTIFIER: US 5176953 A

TITLE: Oriented polymeric microporous films

DATE-ISSUED: January 5, 1993

### INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Jacoby; Philip	Naperville	IL		
Bauer; Charles W.	Batavia	IL		
Clingman; Scott R.	Glen Ellyn	IL		
Tapp; Willilam T.	Marietta	GA		

US-CL-CURRENT: 428/315.5; 428/317.9, 521/128, 521/143, 521/84.1, 521/90

### ABSTRACT:

Polyolefin resin compositions and oriented microporous films prepared from same comprising an ethylene-propylene block copolymer having an ethylene content of about 10 to about 50 wt %, a propylene homopolymer or random propylene copolymer having up to about 10 wt % of a comonomer of ethylene or an  $\alpha$ -olefin of 4 to 8 carbon atoms, and components selected from a low molecular weight polypropylene, a beta-spherulite nucleating agent and an inorganic filler, and to processes for forming such films wherein the microporous films have improved breathability, strength, toughness and break elongation.

6 Claims, 1 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 1

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)

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Term	Documents
(11 AND 2).USPT,PGPB.	9
(L2 AND L11).USPT,PGPB.	9

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 1. Document ID: US 4560611 A

L1: Entry 1 of 3

File: USPT

Dec 24, 1985

US-PAT-NO: 4560611

DOCUMENT-IDENTIFIER: US 4560611 A

TITLE: Moisture-permeable waterproof coated fabric

DATE-ISSUED: December 24, 1985

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Naka; Yasushi	Hirakata			JP
Kawakami; Kiyoshi	Kyoto			JP

US-CL-CURRENT: 442/63; 428/314.2, 428/315.5, 428/315.9, 428/316.6, 428/423.5,  
428/423.7, 442/76, 442/83

## ABSTRACT:

A moisture-permeable waterproof coated fabric having a microporous polyurethane layer is obtained by the so-called wet coagulation method using as a coated solution a polar organic solvent solution containing 8 to 25% by weight of a polyurethane elastomer, 0.1 to 10% by weight of a water repellent agent, 0.2 to 3% by weight of polyisocyanate and 1 to 8% by weight of a nonionic surfactant.

1 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 2

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KWC](#) | [Draw Desc](#) | [Image](#) 2. Document ID: US 4197148 A

L1: Entry 2 of 3

File: USPT

Apr 8, 1980

US-PAT-NO: 4197148

DOCUMENT-IDENTIFIER: US 4197148 A

TITLE: Process for producing a permeable membrane

DATE-ISSUED: April 8, 1980

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shinomura; Toshihiko	Yokohama			JP

US-CL-CURRENT: 156/79, 156/244.24, 156/244.27, 210/500.27, 210/500.33, 264/171.23,  
264/173.14, 264/173.19, 264/210.6, 264/213, 264/234, 264/288.8, 264/345, 264/49

## ABSTRACT:

A process for preparing permeable membranes which comprises mixing in the molten state two different kinds of thermoplastic synthetic resins which are partly compatible with each other, shaping the molten mixture into a sheet- or film-like melt, passing the film- or sheet-like melt through a heated zone, cooling and solidifying it, the time from the shaping of the molten mixture into the film- or sheet-like melt to its cooling and solidification (melt maintenance time) being adjusted to 10 to 600 seconds, treating the resulting film or sheet with a solvent which is a good solvent for one of the component resins but is a poor solvent for the other to dissolve and remove the soluble resin, and drying the product. In place of the resin to be removed by the solvent, rubbers or oligomers having partial compatibility with the resin which remains undissolved can be used.

15 Claims, 1 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 1

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)

[Kotic](#) | [Draw Desc](#) | [Image](#)

3. Document ID: US 4100238 A

L1: Entry 3 of 3

File: USPT

Jul 11, 1978

US-PAT-NO: 4100238

DOCUMENT-IDENTIFIER: US 4100238 A

TITLE: Process for producing permeable membranes

DATE-ISSUED: July 11, 1978

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Shinomura; Toshihiko	Yokohama			JP

US-CL-CURRENT: 264/49, 210/500.28, 210/500.34, 210/500.35, 210/500.36, 210/500.42,  
210/500.43, 264/288.8, 264/DIG.13, 429/254, 521/61, 521/918

## ABSTRACT:

A process for preparing permeable membranes which comprises kneading in the molten state two different kinds of thermoplastic synthetic resins which are partly compatible with each other, fabricating the molten mixture into a sheet, film or hollow article, treating the fabricated article with a solvent which is a good solvent for one of the component resins but is a poor solvent for the other to dissolve and remove the former resin, drying the fabricated article, and then stretching it. In place of the resin to be removed by the solvent, rubbers or oligomers having partial compatibility with the resin which remains undissolved can be used.

4 Claims, 0 Drawing figures

Exemplary Claim Number: 1

[Full](#) | [Title](#) | [Children](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)[NWC](#) | [Print Desc](#) | [Image](#)[Generate Collection](#)[Print](#)

Term	Documents
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4560611S	0
"4100238"[USPT]	1
4100238S	0
"4197148"[USPT]	1
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13 Claims, 2 Drawing figures  
Exemplary Claim Number: 1  
Number of Drawing Sheets: 1

[Full](#) | [Title](#) | [Citation](#) | [Print](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [AMC](#) | [Draw Desc](#) | [Image](#)

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Term	Documents
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4900619S	0
"4929303"[USPT]	1
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"5308691"[USPT]	1
5308691S	0
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"5494745"[USPT]	1
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"5503907"[USPT]	1
((4900619 OR 4929303 OR 5308691 OR 5403444 OR 5494745 OR 5503907 OR 5773123 OR 5863639 OR 5593771 OR 5972147 OR 6070635 OR 6133168)[PN]).USPT.	12

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